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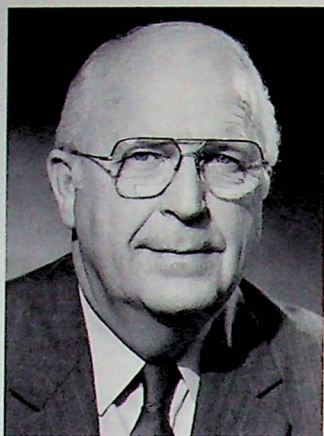
Tindal Re-Elected As State Commissioner of Agriculture

On November 8th, Les Tindal was re-elected once again to another four year term as South Carolina State Commissioner of Agriculture. For those of you who may have missed it, the following excerpt is being reprinted with the permission of the Carolina Farmer, from an interview conducted with Tindal prior to the General Election, to give you some insight as to what lies ahead for South Carolina agriculture in 1995.

D. Leslie Tindal Republican Incumbent

Les Tindal, the Republican incumbent candidate for State Commissioner of Agriculture, says that if re-elected he will continue to look for agribusiness development in the state and expand the marketing program.

Tindal cites his major accomplishments as proof that he can take on these tasks. "I think the No. 1 accomplishment is that I had to reorganize the Department of Agriculture and get the facilities in better condition than they were when I found them," Tindal said.



D. Leslie Tindal

He also stressed how he helped increase marketing points. "We have increased marketing conditions tremendously. We (regularly) call on major chains from Canada to Miami - more than 140 major chains."

Tindal explained that one of the most important issues facing South Carolina agriculture is funding. "We still have some upgrading of facilities and equipment we need to do, and I want to increase the number of fruit and vegetable samples we are running through the lab," Tindal said. He also wants to increase diversification by looking for new crops that a lot of farmers can plant.

Overall, Tindal believes the agriculture industry will continue to grow. "I established the Agribusiness Development Program in South Carolina, where we try to recruit businesses related to agriculture, and the Small Farms Program, which is the first small-farms assistance program in the United States," he said. "We're working on several investments now which I hope will come to fruition."

Tindal, age 66, attended Pinewood public schools and Furman University, and has been S.C. Commissioner of Agriculture since 1982.

He is married to the former Mary Alice Davis. They have four children and eight grandchildren.

Upstate Tree Farm Blends Nature with Technology

by Steven Schultz

From New Cut Road, the Phillips Tree Farm looks like a dwarf forest. Leafy tops of maples, oaks, sycamores, dogwoods, redbuds, all less than 13 feet tall, meld into acre after acre of woodlands.

But underneath that pleasant green canopy is an elaborate growing system that makes the Phillips Farm one of the largest and most technologically advanced nurseries in the Upstate.

Roger Phillips and his wife, Sue, started the farm on one acre in 1976. Since then, they've grown the operation to an 85 acre farm with nearly 100,000 trees.

Rambling through the neatly trimmed alleyways on the beat-up old golf cart he has converted into a kind of all-terrain vehicle, Roger Phillips takes pride in explaining how it all works.

Instead of digging up trees for each customer and balling the roots in burlap, Phillips decided to put his trees in pots. In 1976, that was a radical idea. The Phillips Farm was among the first to pioneer the new type of tree farming, which has become the industry standard.

The advantage of the system is that potted trees are much healthier when they're sold because they don't go through the shock of being dug up just before being shipped.

The disadvantage is the trees need to be watered almost constantly. "Those 100 degree days just about killed us," Phillips said, referring to this summer's heat wave and drought. Watering 12 hours a day, Phillips' small crew of

farm hands dumped 216,000 gallons of water a day into the pots.

The trees, each in its own black plastic pot, are tethered together by a sophisticated watering system. A thin hose snakes between each pot where a tiny sprinkler mounted on a peg is sunk into the soil and delivers a perfect spray of water across the dirt.

When Phillips started, the only place that kind of watering system was available was Israel.

Even when it rains, he still has to water all day because the pots don't retain much water and the trees shed the rain off to the sides.

Growing trees in pots may seem like an artificial way of farming, but Phillips said it actually helps conserve soil. Selling the trees straight out of the ground means selling the farms topsoil along with them. "What happens is the soil just gets poorer and poorer," Phillips said.

In addition, he plants grass between the rows and tries to arrange the trees so that excess water from the irrigation doesn't erode the soil.

"It's important that the land be productive," he said. "And for it to be productive land, you have to take care of it." Phillips' conservation-minded approach has earned him respect among people in the agricultural business.

"His whole system is efficient," said Charlie Gray, Clemson Extension agent in Spartanburg County. "He's the type of man we're proud to work with."

Phillips said business was tough when he started out because no one understood the advantage of buying trees in pots.

He planted 2,000 trees but had to wait three years before they were big enough for potting and selling. So by the time he was ready to sell his first tree, he had planted for three years in a row with no return on the investment. Then, out of the 2,000 trees, he sold only 50. He had to decide whether to cut his losses or keep planting. "It was a big decision," Phillips said. "Here it was, you've put everything into it and nobody's bought your trees, and everyone says no one ever will."

Even though he grew up on his parents' farm, Phillips said he was surprised to find himself in the nursery business. "When I got out of school, I had no desire to go into farming or any kind of agricultural work," Phillips said. "I was going to move to the big city."

He remembers riding by a nursery on the school bus and having no idea what it was. "I figured they kept little kids or something."

Now, Phillips said, he would never turn back. And his son, Ryan, who is the farm's production manager, may one day take over.

"We really feel like we're producing a product that gives quality to life," Phillips said.

(Reprinted from the Spartanburg Herald Journal, via The South Carolina Nurseryman, January, 1994.)

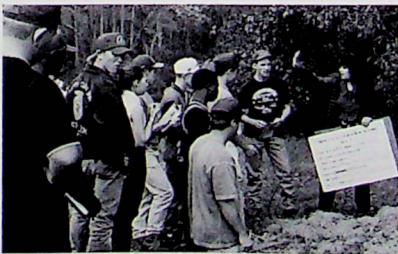
Britton's Neck FFA Claims State Honor



1994-1995 State Soil Judging Champs - Britton's Neck High School; (L-R) State FFA President John Helms, State Ag Ed Associate Dr. Dale A. Law, Advisor Jerry Pace, Jay Cribb, Tim Holden, Vince Pace, Lance Robertson, Alternate, Alternate, and CP&L representative Craig DeBrew.

FFA soil judging teams from around the state converged on the Sandhills Experiment Station in Pontiac early on the morning of November 5th to compete in the annual South Carolina FFA Soil Identification and Land Treatment Meet. Having previously been tested in chapter, federation, and district competition, these chapters competed for the honor of representing the S.C. FFA Association in the annual National Land Judging Contest to be held May 3-4, 1995 in Oklahoma City, Oklahoma. Particularly significant because this year marked the 40th anniversary of the competition, turnout was great with 18 teams from four districts vying for top honors.

After registering and receiving instructions, the groups moved to one of four predetermined test sites to begin analyzing soil composition and ascertaining the most effective use for the land in that area. Each team, consisting of four members, recorded their findings on score cards before rotating to the next site. Then, having completed testing at all locations, they turned in their score cards for tabulation and boarded trucks and vans to travel back to the administration building



Contest participants receive instructions regarding the field conditions of Hole #1 prior to beginning analysis.

where a catered lunch was served.

Accumulating a high score of 607 out of 720 points, the team from Britton's Neck



First Place Individual Award Winner Vince Pace, of the Britton's Neck FFA Chapter, poses with State FFA President John Helms, State Ag Ed Associate Dr. Dale A. Law, Advisor Jerry Pace, and CP&L representative Craig DeBrew.

High School, accompanied by FFA Advisor Jerry Pace, took first place in the competition. Team members were Jay Cribb, Tim Holden, Vince Pace, and Lance Robertson. In addition, they also produced the state's individual high scorer in the form of Vince Pace who scored 219 out of a possible 240 points. Second place in the state competition was awarded to Lexington ATC, who came in at just 5 points under Britton's Neck! Team members included Jamie Gunter, Jason Bolin, Kevin Sanders, and Chris Schultz, and they were accompanied by Advisor Tommy Harmon. Finally, the prize for the second highest scoring individual was awarded to Craig Whisenhut of the Edisto Chapter, who tallied 218 out of 240 points.

In addition to receiving \$1,200 towards expenses to the national meet in the spring, the Britton's Neck and Lexington ATC



For contest participants, measuring the depth of the topsoil involves just one phase of the overall judging process.



Second Place Individual Award Winner Craig Whisenhut, of the Edisto FFA Chapter, poses with State FFA President John Helms, State Ag Ed Associate Dr. Dale A. Law, Advisor George Ulmer, and SCE&G representative Angie Ellisor.

teams were presented with plaques designating them as the top soil judging teams in the Palmetto State. Individual high scorer Vince Pace received \$450.00 towards his trip to the National FFA Convention later that month and Craig Whisenhut was presented with an engraved gold watch. Also receiving plaques were the winners from each district: Abbeville (District I), Lexington ATC (District II), Britton's Neck (District III), and Wagener-Salley (District IV).

Staged annually by the Office of Occupational Education at the Department of Education in cooperation with the State FFA Association, the meet is also sponsored by Carolina Power and Light Company, Duke Power Company, South Carolina Electric & Gas, the South Carolina Conservation Districts Foundation, the South Carolina Association of Conservation Districts, and the South Carolina Department of Natural Resources.



Second place, State Soil Judging Competition - Lexington ATC; (L-R) State FFA President John Helms, State Ag Ed Associate Dr. Dale A. Law, Jamie Gunter, Kevin Sanders, Chris Schultz, Jason Bolin, Advisor Tommy Harmon, and SCE & G representative Angie Ellisor.

Agricultural Biotechnology Technician Skill Standards

Editor's Note: The following is an excerpt taken from the new *National Voluntary Occupational Skills Standards* booklet developed by the USDE/FFA Agricultural Industry Subcommittee on emerging agricultural occupations and future skill standards.

Agricultural Biotechnology Technician is an emerging occupation—one that is expected to have great growth potential over the next decade and beyond. Currently, there are hundreds of companies, universities and government agencies involved in agricultural biotechnology research worldwide—research that holds tremendous promise for improving the quality and quantity of food and fiber.

To realize its potential, the agricultural biotechnology industry will need increasing numbers of specially trained technicians to work in research laboratories, growth chambers, greenhouses, the field and on the farm. Required skills will include isolating and repairing equipment malfunctions, monitoring product performance to ensure quality control, identifying harmful plant diseases, mowing, working in greenhouses, doing floral design, and procuring, processing and marketing ag products, and that's just the tip of the iceberg! The National FFA Foundation—through a grant from the U.S. Department of Education and matching funds from industry—has developed voluntary skill standards to guide students in their educational progress and to assist educators in developing agricultural biotechnology curricula that meet industry needs.

Agriculture education and the FFA Foundation are dedicated to providing students with the skills and information they need to make wise career choices. We also are dedicated to broadening the recognized scope of agricultural careers beyond production agriculture. We believe that biotechnology can and will make significant, positive impacts on world agriculture. We believe that this growth will lead to increased job opportunities for technicians who have less than a baccalaureate degree.

Education and training programs that are already gearing up to national skill standards will help ensure that agricultural biotechnology employers throughout the U.S. will have access to properly trained technicians.

For more information on the new skill standards, please see your teacher or advisor, or contact Dr. Dale Law, the State Education Associate for Natural, Environmental & Agricultural Resources Education at (803) 734-8426.

Making Plants Immune To Viruses

By Hank Becker, USDA
Agricultural Research Service

A wide range of ornamental flowers including orchids and gladiolus—as well as some of the country's major economic crops, such as beans, peas, and forage

“When we inserted this gene in some experimental tobacco plants, we found it ‘disarmed’ invading plant viruses.”

Antisense technology is a form of genetic engineering in which cells are instructed to do the opposite of what one of their genes is telling them to do. Antisense is “not new, but this is the first time it’s been used successfully to create virus-resistant plants,” Hammond explains.

“Plants with the antisense gene that was taken from bean yellow mosaic virus (BYMV) protected the engineered tobacco plants from the virus. Says Hammond, “A desert species of the tobacco plant, *Nicotiana benthamiana*, was used because it’s very susceptible to potyviruses.”

Hammond worked for about 2 years with plant pathologist Kathryn Kamo and plant geneticist Robert Griesbach on perfecting this technology. He believes that similar techniques should work with related viruses that infect fruit trees. And he estimates that the antisense gene might be ready in 2 to 5 years for breeders of floral and other crops to use.

Says Hammond, “BYMV-resistant plants would give growers a better chance to increase both yield and quality.”

“Even more important,” adds Lawson, “is the time saved. Antisense gene technology could shorten by generations the time needed to breed resistance into agro-nomically adapted tree crops. With traditional breeding programs, plants have to be essentially re-bred, and then even more time needed to screen for resistance.”



By modifying plants with antisense RNA, plant pathologist John Hammond has induced the virus resistance shown by the leaf on the right.

legumes—have long needed effective protection from serious viral enemies. So plant pathologist John Hammond in the Agricultural Research Service Florist and Nursery Crops Laboratory at Beltsville set out to use a new genetic technology—antisense—to build in plant immunity.

“We reversed the coding sequence of a piece of genetic material taken from a plant virus to create an antisense gene,” he says.

To contact scientists mentioned in this article, write or call Hank Becker, USDA-ARS Information Staff, 6303 Ivy Lane, Room 440, Greenbelt, MD 20770. Phone (301) 344-2769, fax number (301) 344-2311. Article reprinted from July 1993 issue of Agricultural Research.

Careers with the Agricultural Research Service (ARS)

General Information

The Agricultural Research Service is the scientific research division of the U.S. Department of Agriculture. Their facilities (at 122 locations nationwide) are situated strategically across the major farm and rangeland ecosystems and climatic zones of the United States. There are 8,200 persons employed by ARS on a full-time basis. Two-thirds of these employees are research personnel with the remainder support staff. The current budget for ARS is more than half a billion dollars. Individuals with backgrounds in all engineering applications, soil sciences, animal sciences, range management, microbiology, chemistry, biochemistry, plant science, and entomology have excellent opportunities with ARS.

Research Scientists

ARS currently employs about 2,600 scientists, representing 30 scientific disciplines. The most common scientific disciplines are chemist, entomologist, soil scientists, plant physiologist, agronomist, agricultural engineer, plant pathologist, geneticist, food technologist, hydrologist, and mathematicians. Most of the ARS scientists start at the GS-11 level or above and are recent Ph.D.'s in the biological and physical sciences.

Technician Positions

Many positions in ARS are for biological, physical sciences, and engineering technicians. Most applicants for these positions have bachelors' degrees, although a degree is not required for all positions, advancement beyond technical support without a Ph.D. level education is limited.

Technicians provide technical support and assistance to professional personnel engaged in scientific work in the biological, physical, agricultural sciences, engineering, and veterinary medicine.

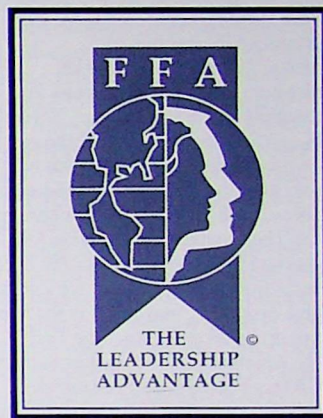
Biological laboratory technicians and agricultural research technicians do technical work in laboratories, fields, greenhouses, and other experimental areas. Their work involves genetic engineering, specialized chemical and biological work, plant propagation, specimen collection, harvesting and application of various treatments, data collection using computer programs, and similar tasks. The technical staff is the "hands on" researcher.

Summer and Seasonal Position

There are positions available for high school and college students at locations throughout the United States. College students must be enrolled in a field related to the assigned work.

Support Staff Positions

The research scientists and technicians are supported by administrative related and wage grade employees. Administrative support positions include clerical personnel, management assistants and specialist positions in such areas as budget, computers, personnel, procurement, purchasing, and safety. Wage grade employees represent trade and labor positions: E.g. animal caretaker, boiler plant operators, and maintenance mechanics. These support positions require experience and training or education in the particular skills.



Urban Forestry Grants

Small Business Tree Planting Program

Through the Small Business Administration's Tree Planting Program, funds are available for contracting with small businesses to plant trees on public land. State and local governments and schools and nonprofit organizations may apply, but trees must be planted on land owned or controlled by state or local government. A small business concern must plant the trees.

The applicant must provide at least 50% of the total project cost. For 1995, \$196,238 is available in South Carolina. Proposals are recommended for \$1,000 to \$10,000 of Federal funds. Applications are made through the Forestry Commission and will be accepted through January 1995. Contact: Dawn Hinson.

Urban and Community Forestry Grant

The S.C. Forestry Commission, in cooperation with USDA Forest Service, is authorized to make grants to local units of government, nonprofit organizations, civic or neighborhood associations, and educational institutions for urban and community forestry projects.

Projects that will qualify for funding include: master tree inventories, street tree inventories, public education materials, demonstration tree planting and maintenance projects, development of tree ordinances, training and continuing education, local government and nonprofit organization staffing.

In South Carolina, \$185,000 was available for 1994, and the funding level will be about the same for 1995. The

grantee must provide at least 50% of the total project cost. The recommended funding range is \$1,000 to \$10,000. This grant will be advertised in early 1995. Contact: Joel Felder.

To be placed on the mailing list for both of these grant programs, give your name and address to Joel Felder or Dawn Hinson at:

**South Carolina
Forestry Commission
P.O. Box 21707
Columbia, SC 29221
(803) 896-8800**

Spartanburg Tech Keeps Pace With Changing Student Needs

As the field of horticulture continues to expand, so do the numerous career opportunities associated within; consequently, the need for professionals in horticulture and related areas has greatly increased. Through educational partnerships between high schools, technical colleges and universities, students are becoming better prepared to respond to these changes and take advantage of exciting new opportunities. Current graduates have open to them diverse areas of employment ranging from landscaping and grounds management to greenhouse operation and nursery and garden center management, and still more possibilities exist within parks and agribusinesses.

Enter Jimmy Painter and his Horticulture Technology program at Spartanburg Technical College. Several years ago Spartanburg Tech began entering into Articulation Agreements with high schools and vocational schools in their service area that had quality horticulture programs. These agreements provide for Advanced Placement credit for HRT 101 (Introduction to Horticulture) for students of these programs who enroll in the horticulture program at Spartanburg Tech. Today, Spartanburg Tech has agreements with 20 high schools and vocational schools in 8 counties. As a result, ten students in the 1994 fall class received AP credit for their work. Discussing some of the primary benefits of the Articulation program, Painter explained, "The high school teachers and the Tech staff are able to exchange ideas and communicate more effectively. The agreements provide a mechanism for easier communication which helps provide continuity for students going from high school to the Tech program." In addition, Spartanburg Tech has instituted a Partnership Agreement with Clemson University that provides for a smooth transfer from their program to the one at Clemson.



The design and installation of this "backyard garden" won first place for Spartanburg Tech's Horticulture Program last year in the Schools & Colleges division of the Southern Spring Show in Charlotte, NC.

Horticulture Technology at Spartanburg Tech is a two-year Associate Degree program that places primary emphasis on landscaping, nursery and greenhouse work. The department maintains several facilities for teaching the hands-on applications of horticulture, including three greenhouses, a school nursery, and a three-acre ornamental garden on campus. Access to these areas helps provide students with many practical learning experience opportunities. "The students are responsible for completing the normal school projects and designs as well as producing and selling greenhouse and nursery crops in order to fund our field trips and garden tours. They also design, install and maintain the Spring Show Garden at the Southern Spring Show held in Charlotte each year," stated Painter. In 1994,



Horticulture students Thomas Dismukes and Josh McMillian "dig in" during the early stages of the garden installation.

Painter's students took first place in the Schools & Colleges Division at the Spring Show for the design and installation of their "backyard garden".

Charlie Dunn, of Southern Shows (the promoter of the annual Southern Spring Show) said, "Spartanburg Tech has long been a supporter of the show, and they have another extensive garden planned for this year. They use it as a tremendous learning experience. During the week that they set up and install the garden, they have the opportunity to work alongside professionals in the industry and make some great contacts." All in all, by the time these gardens spring to life inside the Merchandise Mart in Charlotte, every aspect of the design, installation, and maintenance has been covered by Jimmy Painter's horticulture students.

In addition to the above-mentioned activities, Painter's students supplement their education throughout the year by attending several annual trade conferences, working on community projects like Habitat for Humanity, and touring presti-



Horticulture student and member of the Garden Installation Team, Josh McMillian plants the groundcover in the garden.

gious Southern gardens. Last year students spent three days touring Charleston Gardens, and this year plans include visits to Calloway Gardens and the Atlanta Botanical Garden, both in Georgia.

In short, in a world where the job market has shifted direction to place greater emphasis on positive attitudes, teamwork, problem-solving and creative thinking, it would seem that Jimmy Painter and his aged students have already found their place. To get a first-hand look at some of their work, make plans to visit their horticulture display at the 1995 Southern Spring Show to be held February 25 - March 5 at the Merchandise Mart in Charlotte. For more information on this show in general, contact Charlie Dunn at (704) 376-6594.

South Carolina's post-secondary educational system boasts several fine horticultural programs in its colleges and universities that are designed to help you reach your career goals. For more information on Palmetto State program offerings, contact:

Preston Lewis
Horticulture Technology
Trident Technical College
P.O. Box 10367
Charleston, SC 29411
(803) 572-6275

Jimmy Painter
Horticulture Technology
Spartanburg Technical College
P.O. Drawer 4386
Spartanburg, SC 29305
(803)591-3600

Dorie Eckard
Horticulture Technology
Technical College of the Lowcountry
100 South Ribaut Road
Beaufort, SC 29901
(803) 524-3380

Dr. Judy Caldwell
Horticulture Department
173 Poole Agricultural Center
Clemson University
Box 340375
Clemson, SC 29634-0375
(803)656-4952

National FFA Convention Exemplifies "The Leadership Advantage"



South Carolina State Officers gather under the delegate sign for a photo.

More than 34,000 FFA members from around the country united at the 1994 National FFA Convention in Kansas City, Missouri during the week of November 9-13 to compete in national contests, attend educational seminars, listen to motivational speakers, receive awards and participate in numerous other activities which were all designed to promote the convention theme, "FFA-The Leadership Advantage". Throughout the week members were challenged to further enhance their leadership skills, build bright futures in the science, business and technology of agriculture and continue involvement in their hometowns.

Each year, hundreds of FFA members from the Palmetto State join FFA members from all over the United States (including chapters from Alaska, Hawaii, Puerto Rico, and the Virgin Islands) in Kansas City to take part in the world's largest annual student gathering and show their support for the blue and gold of the FFA. Traveling by bus, by car, and by plane, they converged on the Howard Johnson Convention Center and Hotel located in downtown Kansas City for a hectic but exciting week of activities.

Olympic gold medalists Florence and Al Joyner kicked off the convention

by inspiring the crowd of students with a message promoting positive attitudes, goal setting and developing the courage to persevere against the odds. Later sessions featured such distinguished speakers as Secretary of Agriculture Mike Espy, Mary Fisher, founder of the Family AIDS Network, Miss America Heather Whitestone, Vietnam Veteran

Dave Roeber, Tennessee Commissioner of Agriculture L.H. "Cotton" Ivy, and Guy Kawasaki, author and former Director of Software Product Management for Apple Computer, Inc.

In addition to the multitude of convention activities mentioned above, FFA members found the time to work in visits to the FFA Career Show, FFA Shopping Mall and the American Royal Rodeo as well. This year's National Agricultural Career Show was the first ever to fill the recently completed expansion of the Kansas City Convention Center, where the majority of convention activities take place. The expansion to 62,000 square feet of show space accommodated 284 exhibitors including 25 displays in the hall of states, a special exhibit from NASA, an 18-store FFA Shopping Mall, the FFA Food Court and a stage that was the site for live entertainment, speakers and audiovisuals.

At the career fair, students visited exhibits and spoke with representatives from hundreds of agriculture-related associations, corporations, and schools to discuss educational and career opportunities, as well as to sign-up for free drawings and give-aways! And as always, the big crowd-pleaser was the American Royal Rodeo which is among the top five percent of rodeos sanctioned

Continued on page 10



State FFA Vice-President Stony Oswald participates in the Flag Grand Entry at the opening of the Fifth General Session held at the Kansas City Convention Center.



Hawaiian FFA members perform an authentic hula dance during the National FFA Talent Contest.

each year by the Professional Rodeo Cowboys Association. The rodeo encompasses a total of six competitive events mixed with specialty acts, bull-fighting clowns, and country music concerts. This year South Carolina FFAers attended concerts from such country music favorites as John Berry, Shenandoah, and Diamond Rio!

However, in spite of the seemingly limitless number of entertainment options open to them, South Carolina FFA members concentrated most of their energy on competing in national contests and receiving individual and chapter awards. Three members of the South Carolina delegation, Anthony Graves and Edward Reason of Britton's Neck and Wendell Bruner of Hunter-Kinard-Tyler, were among only 1,454 recipients of the FFA organization's highest award, the American FFA Degree. Holly Hill students Jeremy Ham and Tonya Smalls represented South Carolina as members of the National FFA Chorus and participated in hours and hours of rehearsals



Guy Kawasaki, former Apple Computer Software Product Management director and keynote speaker at the national convention, signs copies of his best-selling book, "Selling the Dream", for visitors to the FFA Shopping Mall.

and concert sessions. Britton's Neck student Lance Robertson and Furman/Manchester student Jennifer Newman received prestigious Achievement in Volunteerism Awards, and Loris and Britton's Neck both took home National Chapter Safety Awards. And the list goes on! (See awards page for complete list of award winners.)

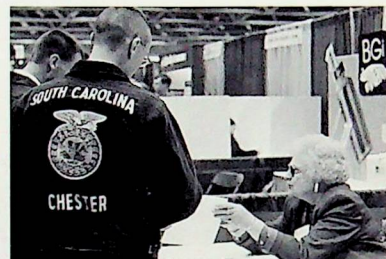
All in all, the week spent in Kansas City proved invaluable as an educational and inspirational setting in which FFA students could continue to learn and grow, and then take their experiences back to their chapters to share with others. The conclusion of the convention week brought with it the election and installation of the new national FFA officers. The 1995 National Officers Team consists of: Corey Flournoy of Chicago, IL, President; Travis Hagen of Chico, CA, Secretary; Jennafer Neufeld of Inman, KS, Central Region Vice-President; Lee Schroeder of Leipsic, OH, Eastern Region Vice-President; Trisha Bailey of Dover, FLA, Southern Region Vice-President; and Greg Vetter of Carpenter, WY, Western



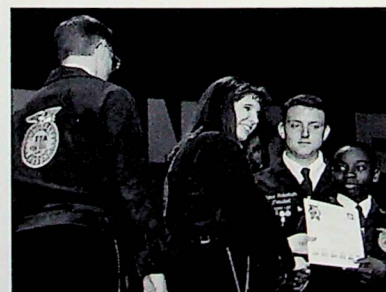
Members of the Aynor FFA Chapter speak with a representative at the North American Elk Breeders Association booth during the Career Show.



South Carolina State FFA President John Helms brought delegates to their feet with his entertaining "Great Balls of Fire" routine at the conclusion of a National Delegate Business Session.



Chester FFA members pick up some literature at one of the hundreds of booths at the National FFA Career Show.



Britton's Neck FFA President Lance Robertson (background) and a fellow chapter member step forward during the National Convention to receive their chapter BOAC award.

Region Vice-President. Each one of these officers will travel over 200,000 miles promoting FFA and visiting chapters, so be on the lookout for them!



Hands-on exhibits like this one are always among the most popular at the convention.

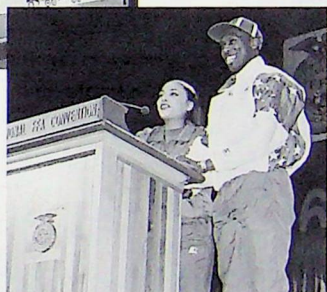


Hosting bigger and better exhibits each year, the FFA Career Show is the site of various materials and equipment displays, such as this one by Dodge.



Examples of the latest advances in the partnership between agriculture and the environment surface at the annual career show.

Olympic medalists Florence and Al Joyner were keynote speakers during the Reflections sessions of the convention.



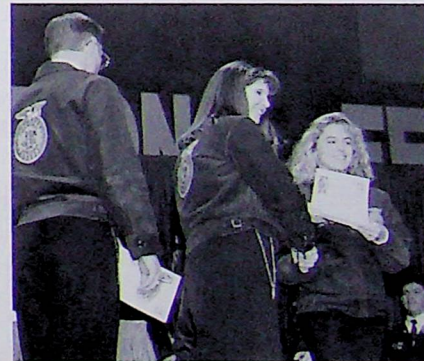
Advisor Rodney Mann and his Ridge Spring-Monetta chapter attend the South Carolina association "pep" meeting put on by state officers downstairs at the Howard Johnson Hotel.



Your new 1994-1995 National Officers: (L-R) National Secretary Travis Hagen of Chico, California; National President Corey Flournoy of Chicago, Illinois; Southern Region Vice President Trisha Bailey of Dover, Florida; Western Region Vice President Greg Vetter of Carpenter, Wyoming; Central Region Vice President Jennafer Neufeld of Inman, Kansas; and Eastern Region Vice President Lee Schroeder of Leipsic, Ohio.



Advisor Frank Stover, Jr. and members of the Crescent, Pelion, and Gilbert FFA chapters gather outside the convention center auditorium for a group photo.



The McBee Chapter receives national recognition for their 1994 BOAC project.

The Leadership Advantage 1994 National FFA Convention Award Winners

NATIONAL FFA CHORUS MEMBERS

Jeremy Ham - Tenor 1 (Holly Hill)
Tanya Smalls - Soprano 2 (Holly Hill)

AMERICAN FFA DEGREE

Anthony Graves (Britton's Neck)
Edward Reason (Britton's Neck)
Wendell Bruner (Hunter-Kinard-Tyler)

AG MECHANICS -

Wagener-Salley (BRONZE)

Oscar rushton (Silver)
Stan Hunnicutt (Bronze)
Jamie Poole (Bronze)

FARM BUSINESS MANAGEMENT

Britton's Neck (BRONZE)

Vince Pace (Silver)
Tim Hlden (Bronze)
Jay Crigg (Bronze)
Amanda Douglas (Bronze)

FLORICULTURE -

Rock Hill (Bronze)

Jennifer Hargett (Silver)
Christie Patterson (Bronze)
Corey Watson (Bronze)

FORESTRY -

Pleasant Hill

Nicholas Lewis (Bronze)
Spencer Altman (Bronze)
Corey Owens (Bronze)

LIVESTOCK -

Wagener-Salley (BRONZE)

Derrick Cooper (Silver)
Cliff Williamson (Silver)
Jon Chavis (Silver)
Stony Oswald (Bronze)

NURSERY/LANDSCAPE -

Rock Hill (BRONZE)

Tim Rzeszotarski (Silver)

Claude Mauldin (Silver)

Joni Randall (Bronze)

NATIONAL CHAPTER

SAFETY AWARDS

Loris (silver)
Furman-Manchester (Bronze)

AGRISCIENCE TEACHER

AWARD -

Rupert A. Gray Jr. (Pendleton)

ACHIEVEMENT IN

VOLUNTEERISM AWARD -

Lance Robertson (Britton's Neck)
Jennifer Newman (Furman-Manchester)

BOAC AWARDS -

Pelion (Bronze)
McBee (Bronze)
Britton's Neck (Gold)
Furman-Manchester (Silver)

Careers In Horticulture

Landscape Designer
Landscape Architect
Landscape Architect
Landscape Contractor
Irrigation Specialist
Interiorscaper
Grounds/Turf Maintainer
Interior Maintainer
Golf Course Maintainer
Arborist
University Educator
University Researcher
University Extension Educator
Technical School Educator
Consultant
Student
Manufacturer
Distributor
Broker
Wholesale Nursery Grower
Greenhouse Owner
Sod Producer
Garden Center Retailer
Greenhouse Retailer
Florist

1995 South Carolina Horticulture Industry Trade Show and Seminar

SCHI '95 will be open Friday, February 3 in Columbia at the Adams Mark Hotel with an all day seminar from 8:00 A.M. until 5:00 P.M. An Awards Breakfast will be held Saturday morning at Seawell's and an informal barbeque with a band is planned for Saturday night.

Saturday, February 4th and Sunday, February 5th will be Trade Show Days at the State Fairgrounds. Hours are from 9:00 to 5:00 on Saturday and from 9:30 to 4:00 on Sunday.

Contact Graham Hawkins, Secretary of the South Carolina Nursery Association at (803) 223-7278 for registration information.

Interested in advertising in South Carolina's YF & FFA Magazine?

For more information on ad rates and availability, please contact Ed Crosby at (803) 781-5151.

Agriculture and State Fair Share Rich History

With longstanding ties to the agricultural community, the arrival of the state fair to South Carolina each year signals the culmination of efforts to raise choice livestock, grow award-winning produce, and cultivate superior plants and flowers.

showmanship abilities, and perhaps get a little return on investment. Winners receive ribbons, trophies, and even prize money as reward their efforts, which usually encompasses years of training and preparation. Winners in the livestock cat-



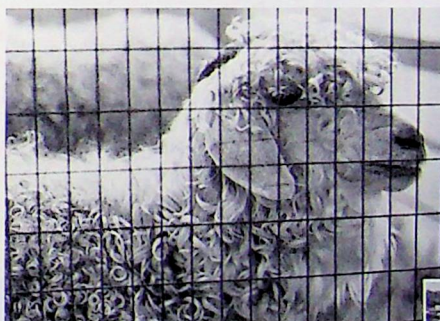
York High FFA students take time out from viewing exhibits to try their hand at the "Balloon Pop" booth. Pictured are: (L-R) Randy Dover, Marc Jackson, Robert Lee Dover, Michael Sibley, and David Daniels.



This display in the Agricultural Exhibit paid tribute to Former S.C. Commissioners of Agriculture from as far back as 1904. Pictured left to right, top to bottom are: Colonel E.J. Watson (1904-17), A.C. Summers (1917-19), B. Harris (1919-25), G.B. Patrick (1976-82), J.W. Shealy (1926-32), Troy Jones (1932-56) and W.L. Harrelson (1956-76).

These contests provide an excellent opportunity for FFA students to display the results of years of hard work, demonstrate their agricultural talents, such as

egories can even draw top dollar in the sale of their animals. But win or lose, it's a learning experience for all. Contest categories range from swine, sheep and horses, to beef, market lambs and dairy goats. Among other things, judging is



This angora goat is a prime example of the growing focus on specialty areas in agriculture.

based on livestock grooming and presentation to showmanship and handling.

For most FFA members, like Hemingway's Elizabeth Burdette, these competitions have become more or less a family affair with mothers, fathers, brothers and sisters helping raise, show and sell their products. For other FFA students, the fair offers an opportunity to view the best of the best in the agricultural community, as well as to stay current



Elizabeth Burdette, of Hemingway High FFA, is a regular competitor at state fair livestock events. Here she grooms "Mary Lou" for the Crossbred Early Summer Yearling competition.



Stop kidding around! These "kids" find an interesting way to pass the time while the others participate in the Dairy Goat Show.

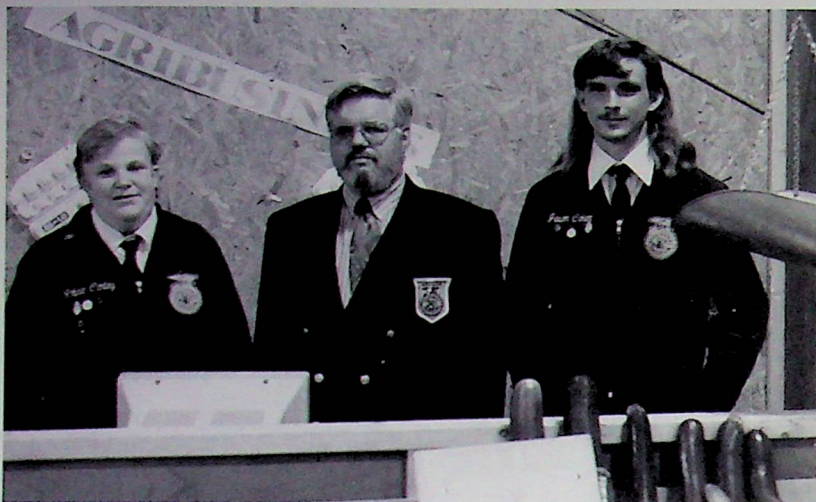
on technological capabilities and innovative advances in the industry. Many FFA chapters, like Manning and York, set aside a day in their school schedule to travel to Columbia to view the fair exhibits, support fellow FFA members, and have a little fun!

A popular motto at the fair this year stated, "There's Culture in Agriculture", and from the caliber of students that contribute to its success in one way or another, one would have to agree!



South Carolina agriculture shares a long history with the annual state fair.

Florence Career Center Promotes FFA



Florence FFA Chapter President Robby Cantey, Advisor Bill Mixon, and chapter Vice President Jason Coker pose at their "roadside stand" exhibit at the Eastern Carolina State Fair.

As preparations were being made in the capitol for the arrival of the S.C. State Fair, FFA Advisor Bill Mixon and his students from the Florence Career Center were already well underway manning their FFA exhibit at the Eastern Carolina State Fair held in Florence County at the beginning of October.

Consisting of a hydroponics display, a simulation of a Space Shuttle tomato seed experiment, a Ford tractor, a Carolina Power & Light display, and a roadside produce stand, the FFA exhibit spanned more than half the length of one wall in the exhibit building. Chapter President



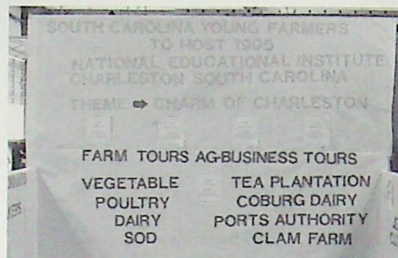
The Florence Career Center FFA exhibit included a hydroponics display and a simulated space shuttle experiment involving tomato seeds.

Robby Cantey and Vice-President Jason Coker worked in shifts with fellow chapter members to run the stand and explain their program to visitors. By selling candy bars from the stand, they were able to raise money to fund chapter projects and alleviate some of the expense of constructing the exhibit. They even helped build an outdoor amphitheater that was designed by the local young farmers association.

Primarily an ag mechanics project, the center's most recent project involved a broken down truck that an amusement company had abandoned in Florence. After negotiating the loan of the truck with fairgrounds administrators, they stripped off the cab and practiced tearing down and rebuilding the engine and conducted maintenance on the air brakes system.



Ford and Carolina Power & Light donated display equipment to the Florence chapter for their exhibit.



The state Young Farmers Association sponsored this exhibit at the fair to promote the National Young Farmers Educational Institute to be held in Charleston in January.

With approximately 40 people in the Florence FFA program out of a couple of hundred pre-vocational students, Mixon expects to double enrollment next year and increase chapter participation. Additional plans include the introduction of aquaculture to the program by installing a tank and filter system in the shop, as well as expanding into hydroponics "big time" with the help of the Clemson University Extension Service.



Florence FFA members sold candy bars at their "roadside stand" to raise money for their chapter.

Rock Hill FFA Flourishes Under Successful Horticulture Program



The 1994 Nursery Landscape Team - Rock Hill Career Development Center: (L-R) Tim Rzeszotarski, Claude Mauldin, and Joni Randall.

For thirteen years, FFA Advisor Susan Sanford has been teaching horticulture at the Rock Hill Career Center and during that time her chapter members have amassed quite a few awards as a result of their efforts.

Just this past summer the Rock Hill chapter won both the State Nursery/Landscape Contest and the State Floriculture Contest at the state convention in Clemson. "The first year my group ever participated in the State Nursery/Landscape competition, they won; and that was around 1987. Since then, they have always been in the top three in Floriculture, and have won State three times. They have also won State twice for Nursery/Landscape," said Sanford. Besides demonstrating practical, hands-on techniques, both of these contests involve plant identification, general knowledge, and plant judging.

Discussing the level of competition that takes place at the state convention, Sanford said, "State contests are beneficial in that they give the students an idea of what national contests are about. However, I would like to see the contests toughen up because I think it would better prepare them for nationals. But whether they place first or last, the fact that they are there representing our state automatically makes them winners." Finishing well this year both teams received bronze awards. They also won two silver and one bronze individual award in the Nursery/Landscape competition and two bronze and one silver individual award in the Floriculture contest.

In addition to team competitions, the Rock Hill chapter is also well known for

their service programs. "We have real strong BOAC programs because we have the opportunity to do a lot of our activities during the day. This year our project involved creating a memorial garden at an area middle school, which was initiated by the death of a student there. But since then, it has evolved into a memorial for anyone who passed through the school that suffered an untimely death," explained Sanford. Beginning the project last year, FFA members handled every aspect from measuring the initial project area (200 ft. X 30 ft.) to designing the garden to selecting and installing the plants. They also brought in concrete and had the masonry students design and build a masonry planter for the garden!

With approximately 45 members in the chapter, Sanford experienced 100% participation this year from students in her horticulture program. "I cover every aspect of horticulture in some way, but I emphasize landscape maintenance, installation and design because of job availability," said Sanford. FFA members learn to grow bedding plants, hanging baskets, and various other seasonal crops which local community members purchase based on the chapter's good reputation and word-of-mouth advertising. Chapter members also have an edge in that their program provides them the facilities and know-how to grow larger trees and plants. This in turn enables them to keep busy with their own landscape projects for area non-profit organizations and members of the school district.

Judging from their 85% placement average, it's apparent that the program develops motivated FFA members. Sanford's students have gone on to

NATIONAL FFA CONVENTION Kansas City, Missouri



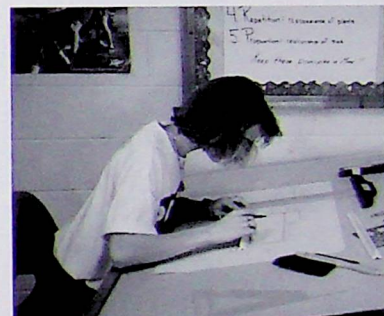
The 1994 Floriculture Team - Rock Hill Career Development Center: (L-R) Jennifer Hargett, Christie Patterson, and Corey Watson.



From planning and design to installation, Rock Hill FFA students developed this memorial garden at an area middle school.

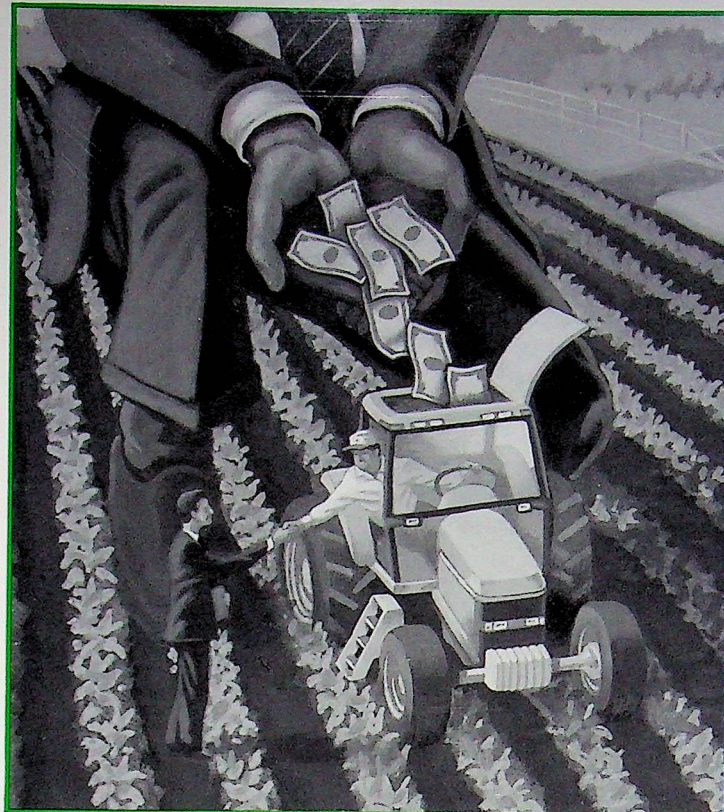


Working as a team, these FFA students complete their task of transplanting trees and shrubs into the courtyard garden.



Drafting project plans is just one facet of the horticulture program taught by Susan Sanford at the Rock Hill Career Center. Here, FFA member Jennifer Hargett revises plans for the Sullivan Memorial Garden project.

become florists, landscapers, grounds maintenance crew members at Carowinds and groundskeepers for the City of Rock Hill. Part of the program's success is further evidenced by their loose articulation agreement with Central Piedmont Technical College in Charlotte and a similar program offer from Spartanburg Tech. (Students have also started at nearby York Tech and moved on from there.) However, whatever the route, it certainly appears as though these Rock Hill FFA'ers have found the road to success.



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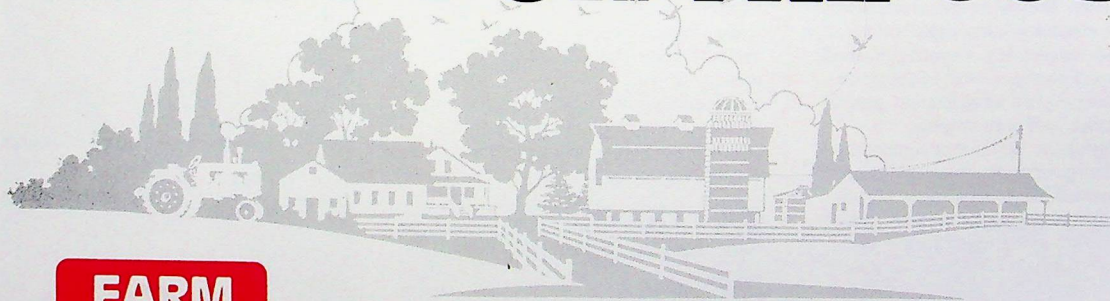
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